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(54) Title: AUTOMATED SPINE SURVEY ITERATIVE SCAN TECHNIQUE (ASSIST)

(57) Abstract: Automated spine localizing, numbering and autoprescription system enhances correct location of diseased or injured tissue, even allow multi-spectral diagnosis. Externally located this tissue is facilitated by an integrated self adhesive spatial reference and skin marking system that is designed for a variety of modalities to include MRI, CT, SPECT, PET, planar nuclear imaging, radiography, XRT, thermography, optical imaging and 3D space tracking. The device ranges from a point localizer to a more multifunctional and complex grid/phantom system. The specially designed spatial reference(s) is affixed to an adhesive strip with corresponding markings so that after applying the unit to the skin/surface and imaging, the reference can be removed leaving the skin appropriately marked. The localizer itself can also directly adhere to the skin after being detached from the underlying strip. A spine autoprescription process performs image analysis that is able to identify vertebrae and discs even in the presence of abnormalities.



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